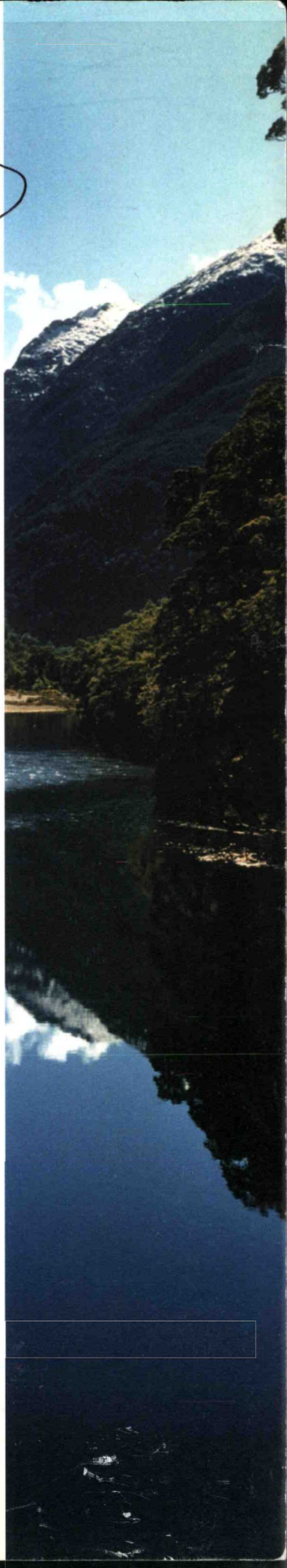
Dept of Ecology LUST #398323
Tosco #6357

4240008



DEPT C

Summary Report
Hydraulic Hoist Removal

for

TOSCO Facility No. 256357
3323 Marine View Drive NE
Marysville, Washington 98271
SECOR International Incorporated
Project No. 01TO.10614.01

Hello Jim,
This goes into another file that you have.
NWRO UST & 396/LUST 398323
Tosco Corporation Site
256357-31157
Tosco #6357
3323 Marine Dr NE
Marysville

SECOR
International Incorporated

4240008

Summary Report
Hydraulic Hoist Removal

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TOSCO Facility No. 256357
3323 Marine View Drive NE
Marysville, Washington 98271
SECOR International Incorporated
Project No. 01TO.10614.01

Prepared for:

Mr. Timothy D. Johnson
TOSCO Corporation,
a subsidiary of Phillips Petroleum Company
3977 Leary Way NW
Seattle, Washington 98107

October 9, 2002

Prepared by:

Kevin E. McCarthy
Staff Geologist

Reviewed by:

Marc Sauze, P.E.
Associate Engineer

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1.0 INTRODUCTION

SECOR International Incorporated (SECOR), on behalf of TOSCO Corporation, a subsidiary of Phillips Petroleum Company, has prepared this report summarizing the results of soil sampling completed during the removal of a single hydraulic hoist at TOSCO Facility Number 256357. SECOR completed the work in accordance with work order 256357-SEC-001, authorized by TOSCO on July 10, 2002. The soil sampling work was completed to investigate the soil quality beneath the hoist during removal activities.

2.0 SITE BACKGROUND

TOSCO Facility Number 256357 (site) is currently operating as a retail petroleum and service station under the "76" brand name. The site is located at 3323 Marine View Drive in the city of Marysville, Washington (Figure 1). The site consists of a station building with three service bays and two petroleum-dispensing islands equipped with a canopy. The building is located approximately in the eastern center of the site, with the dispensing islands located to the west of the building (Figure 2).

The site is located in the Snohomish River delta floodplain at an elevation of approximately 20 feet above mean sea level. The Snohomish River is located approximately 1 mile south of the site. Two smaller water bodies are located closer to the site, Ebey Slough is approximately one-half mile south and Quilceda Creek is approximately three-quarters of a mile to the west.

3.0 FIELD ACTIVITIES

SECOR personnel arrived on-site at 1:00 P.M., July 8, 2002. Photographs of the site were taken and are included as Attachment A. Field notes taken during excavation activities are included as Attachment C.

3.1 Hoist Excavation

The TOSCO subcontractor, Equipment Sales Company, Inc. (ESC), had removed the concrete flooring material and hydraulic hoist prior to SECOR's arrival on the site.

3.1.1 Hoist Description

The in-ground hoist measured 16" in diameter and 96" in length. The hydraulic oil tank was contained within the body of the hoist. The removed hoist appeared to be in good condition, there were no visible cracks, holes, or signs of leakage.

3.1.2 Hoist Excavation Description

The hoist excavation was designated as EX1 and was located in the center service bay, Bay 2 (Figure 2 and 3). EX1 measured 8 feet in width and 7 feet in length and was over excavated within the limits of the floor cuts to a maximum depth of 8.5 feet below ground surface (bgs).

A concrete drain sump was also removed from the hoist excavation. The sump measured 2 feet in width by 3.5 feet in length by 3 feet in depth and was located just below the surface of the concrete overburden material. The sump appeared to be in good condition there were no visible cracks, holes, or signs of leakage.

3.1.3 Stockpile Description

Pending laboratory analytical results, excavated soils were stockpiled on, and covered with, plastic sheeting. The stockpile was located southeast of the service building, in a paved parking area. The soil stockpile was approximately 25 cubic yards in volume.

3.2 Confirmatory Soil Sampling

Two confirmatory soil samples were collected from the vertical extent of the excavation and the soil stockpile using decontaminated brass-sampling sleeves with plastic end caps and sealed with Teflon® tape. Each sample was field screened for contamination via headspace vapor analysis, sheen testing, and olfactory analysis. Soil sampling and field screening procedures are outlined in Appendix D and results summarized in Table 1. Sampling locations are depicted in Figure 3.

3.2.1 Soil Description

The native soils consisted of light brown silty sand with a trace of sub-rounded to sub-angular gravel to the maximum depth excavated of 8.5 feet bgs.

3.2.2 Field Screening Results

Headspace vapor analysis results showed headspace vapor readings of 0.0 parts per million (ppm) for the confirmatory samples collected from EX1 (EX1-1 and EX1-2) and 0.0 ppm for the samples collected from the soil stockpile (SP1-1 and SP1-2). Headspace vapor readings were collected with a MiniRae® 2000 photoionization detector calibrated with 100 ppm isobutylene gas, with an accuracy of 0.1 ppm for readings 0-99, and 1.0 ppm accuracy for readings 100-10,000 ppm. No petroleum-like sheen or odor was detected from any of the samples.

4.0 ANALYTICAL RESULTS

All soil samples collected from the UST excavation and soil stockpile were submitted for the following analyses using the listed methods.

- Total Petroleum Hydrocarbons as Diesel and Lube-Oil (TPH-D and TPH-O) by Ecology Method NWTPH-D_x
- Total Metals (Mercury, Silver, Arsenic, Barium, Cadmium, Chromium, Lead and Selenium) by Environmental Protection Agency (EPA) Method 6000/7000
- Polychlorinated Biphenyls using EPA Method 8082
- Organochlorine Pesticides by EPA Method 8081A

These analyses were chosen based on the presence of the concrete drain sump removed from the excavation.

4.1 Results Summary

Sample EX1-1 registered a TPH-D concentration of 79.6 milligrams per kilogram (mg/kg), and a TPH-O concentration of 274 mg/kg. Sample EX1-2 registered a TPH-D concentration of 73.5 mg/kg, and a TPH-O concentration of 221 mg/kg. Sample SP1-1 registered a TPH-O concentration of 63.3 mg/kg and did not register a TPH-D concentration above the laboratory reporting limit of 50.0 mg/kg. Sample SP1-2 registered a TPH-D concentration of 16.3 mg/kg, and a TPH-O concentration of 45.4 mg/kg

Both EX1 samples registered concentrations above the laboratory reporting limit for a PCB, Aroclor 1254. EX1-1 registered a concentration of 42.8 micrograms per kilogram (µg/kg) and sample EX1-2 registered a concentration of 42.9 µg/kg.

All four samples registered concentrations above the laboratory reporting limit for the following metals; arsenic, barium, chromium, and lead. Sample SP1-1 also registered a concentration above the laboratory reporting limit for cadmium.

The complete results of the field and laboratory analyses are summarized in Table 1. Copies of the laboratory analytical report and chain-of-custody documentation are attached as Appendix B.

5.0 WASTE MANAGEMENT

Based on TPH concentrations recorded in the stockpile sample, management of the stockpiled soils required adherence to the DOE document '*Guidance for the Remediation of Petroleum Contaminated Soils*'. SECOR contacted TPS Technologies Inc. (TPS) and arranged for the disposal of the stockpiled soils at a state-licensed facility. A copy of the waste disposal manifest is included as Attachment E.

6.0 SUMMARY

SECOR personnel completed confirmatory soil sampling during the removal of a single hydraulic hoist at TOSCO Facility Number 256357 on July 8, 2002. Two confirmatory soil samples were collected from the vertical extent of the hoist excavation, approximately 8.5 feet bgs. Additionally, two composite soil samples were collected from the stockpiled soils for waste profiling purposes.

Sample EX1-1 registered a TPH-D concentration of 79.6 milligrams per kilogram (mg/kg), and a TPH-O concentration of 274 mg/kg. Sample EX1-2 registered a TPH-D concentration of 73.5 mg/kg, and a TPH-O concentration of 221 mg/kg. Sample SP1-1 registered a TPH-O concentration of 63.3 mg/kg and did not register a TPH-D concentration above the laboratory reporting limit of 50.0 mg/kg. Sample SP1-2 registered a TPH-D concentration of 16.3 mg/kg, and a TPH-O concentration of 45.4 mg/kg

Both EX1 samples registered concentrations above the laboratory reporting limit for a PCB, Aroclor 1254. EX1-1 registered a concentration of 42.8 micrograms per kilogram (µg/kg) and sample EX1-2 registered a concentration of 42.9 µg/kg.

All four samples registered concentrations above the laboratory reporting limit for the following metals; arsenic, barium, chromium, and lead. Sample SP1-1 also registered a concentration above the laboratory reporting limit for cadmium.

SECOR appreciates the opportunity to provide environmental consulting services to TOSCO. If you have any questions or comments regarding the information provided in this report or the status of the project, please contact Marc Sauze or Kevin McCarthy at (425) 372-1600.

TABLES

Table 1
Field Screening and Analytical Results

Sample ID	Depth bgs (feet)	Field Screening Results			NWTPH-Dx (mg/kg)		Total Metals (mg/kg)					PCBs (µg/kg)	OCPs (mg/kg)
		PID (ppm)	Sheen	Odor	TPH-D	TPH-O	Arsenic	Barium	Cadmium	Chromium	Lead	Aroclor 1254	
EX1-1	8.5	0.0	No	No	79.6	274	2.85	52.7	<0.500	29.7	8.10	42.8	ND
EX1-2	8.5	0.0	No	No	73.5	221	2.96	60.3	<0.500	31.5	7.05	42.9	ND
SP1-1	NA	0.0	No	No	<50.0	63.3	2.83	50.6	1.41	36.1	4.23	<25.0	ND
SP1-2	NA	0.0	No	No	16.3	45.4	2.83	56.2	<0.500	33.6	3.69	<25.0	ND

Notes

NWTPH-Dx - Northwest Total Petroleum Hydrocarbons Diesel Range Extended

TPH-D - Total Petroleum Hydrocarbons in the diesel range, analyzed by Ecology Method NWTPH-Dx

TPH-O - Total Petroleum Hydrocarbons in the oil range, analyzed by Ecology Method NWTPH-Dx

Total Metals analyzed by EPA 6000/7000 Series

OCPs - Organochlorine Pesticides by EPA Method 8081A

PCBs - Polychlorinated Biphenyls by EPA Method 8082

mg/kg = milligrams per kilogram

µg/kg = micrograms per kilogram

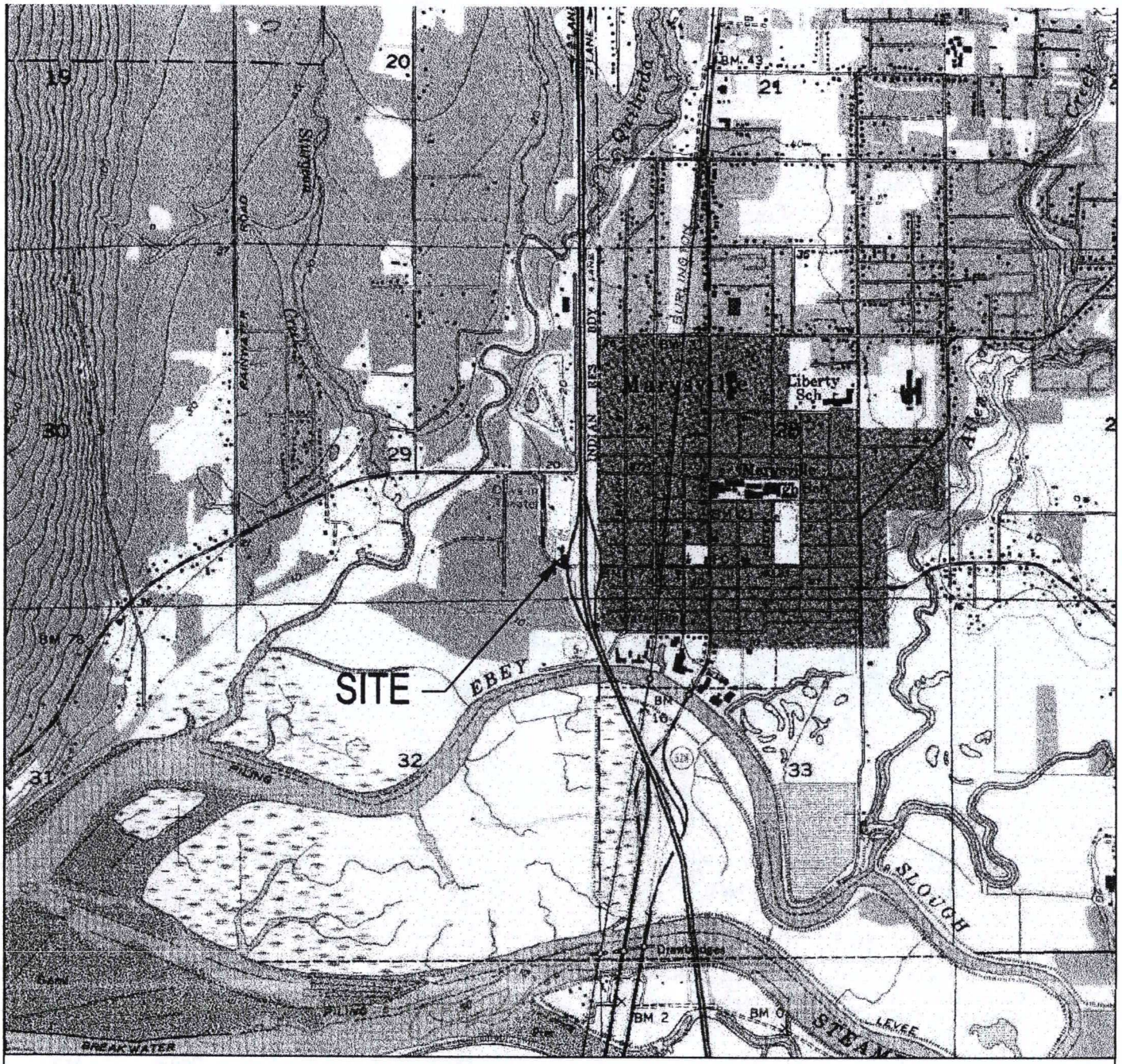
ND - No constituent was detected above the laboratory reporting limits

PID - Photoionization detector

ppm - Parts per million

bgs - below ground surface

FIGURES



North

WASHINGTON

1 1/2 0 1

SCALE (MILES)

1000 0 1000 2000 3000 4000 5000 6000 7000

SCALE (FEET)

REFERENCE: USGS 7.5 MINUTE QUADRANGLE; MARYSVILLE, WASHINGTON; 1973

SECOR
International Incorporated
12034 134th COURT NE, SUITE 102
REDMOND, WASHINGTON 98052
(425) 372-1600

SITE LOCATION MAP

PHILLIPS NO. 256357
3323 MARINE VIEW DRIVE
MARYSVILLE, WASHINGTON

FIGURE: 1

JOB#: 01TO.10614.01.0001 APPR: DWN: SES DATE: 8/19/02

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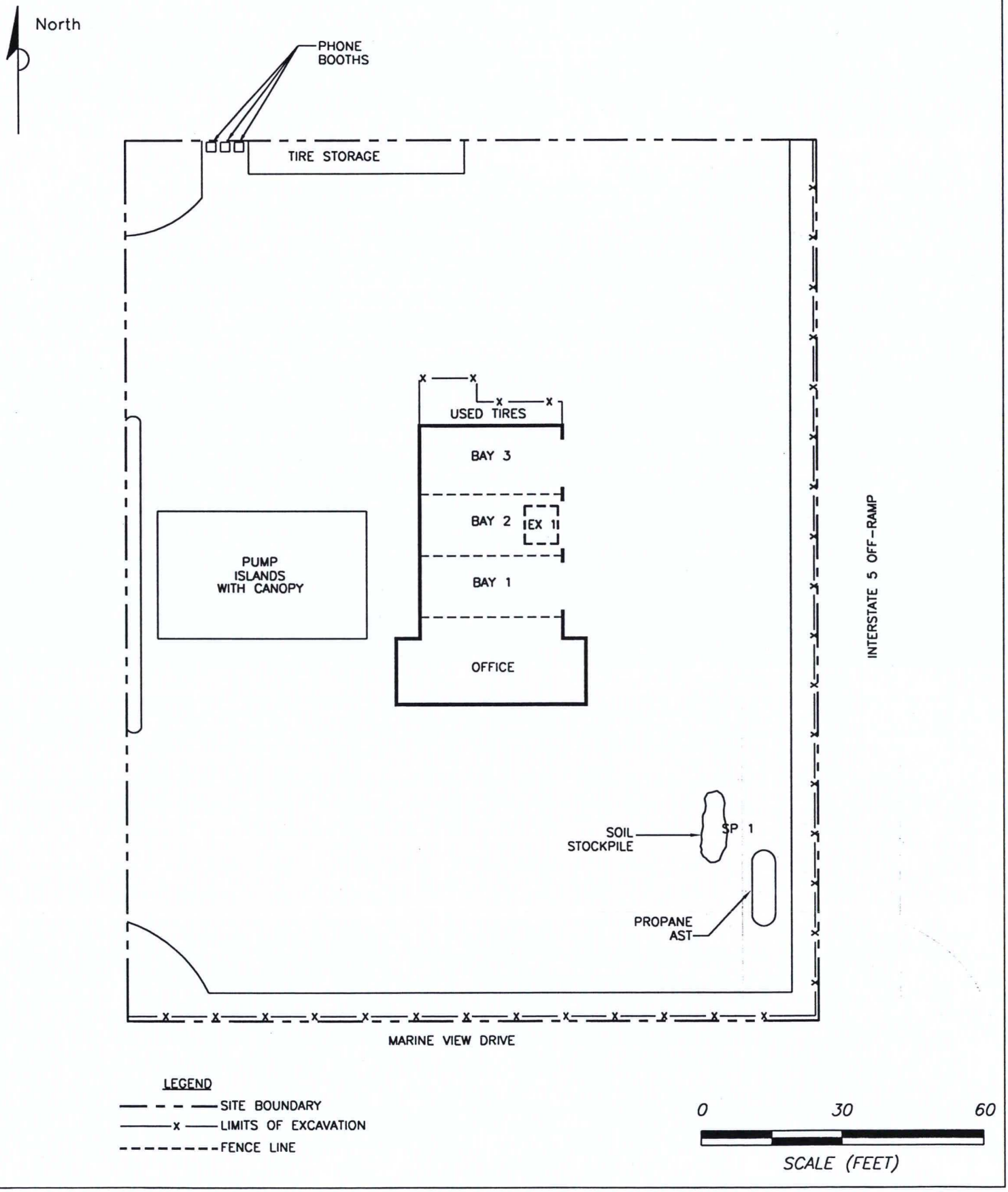
DWG: 256357(M)



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SITE PLAN WITH LIMITS OF EXCAVATION PHILLIPS NO. 256357 3323 MARINE VIEW DRIVE MARYSVILLE, WASHINGTON

FIGURE: 2

JOB#: 01TO.10614.01.0001 APPR: DWN: SES DATE: 8/19/02

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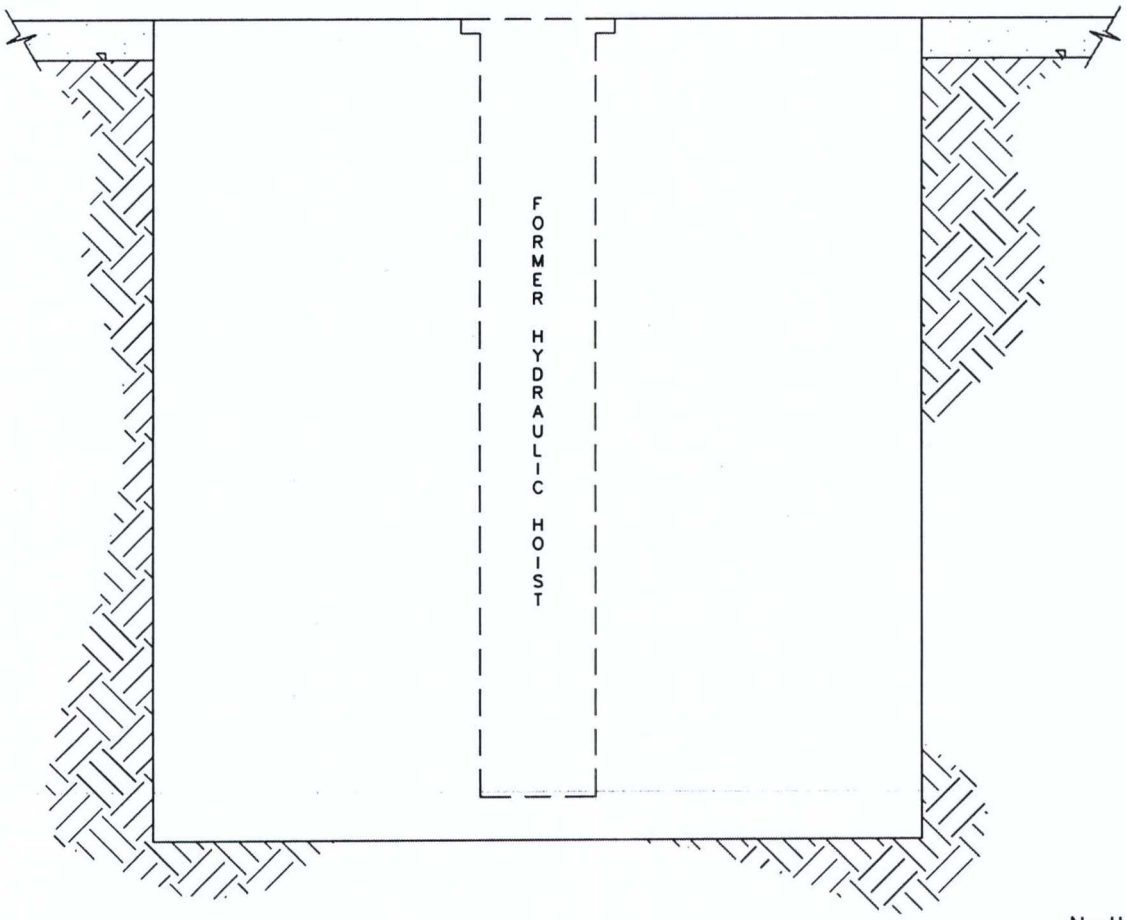
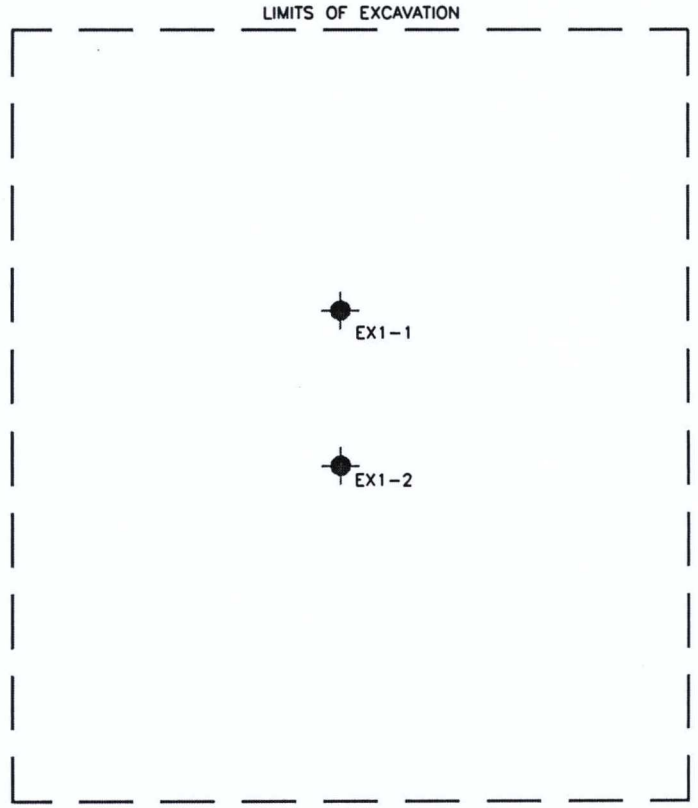


SECTION VIEW

1"=2'



North

PLAN VIEW

1"=2'

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EXCAVATION DETAILS

PHILLIPS NO. 256357
3323 MARINE VIEW DRIVE
MARYSVILLE, WASHINGTON

FIGURE: 3

JOB#: 01TO.10614.01.0001 *APPR:* *DWN: SES* *DATE: 8/19/02*

DWG: 256357(SP)

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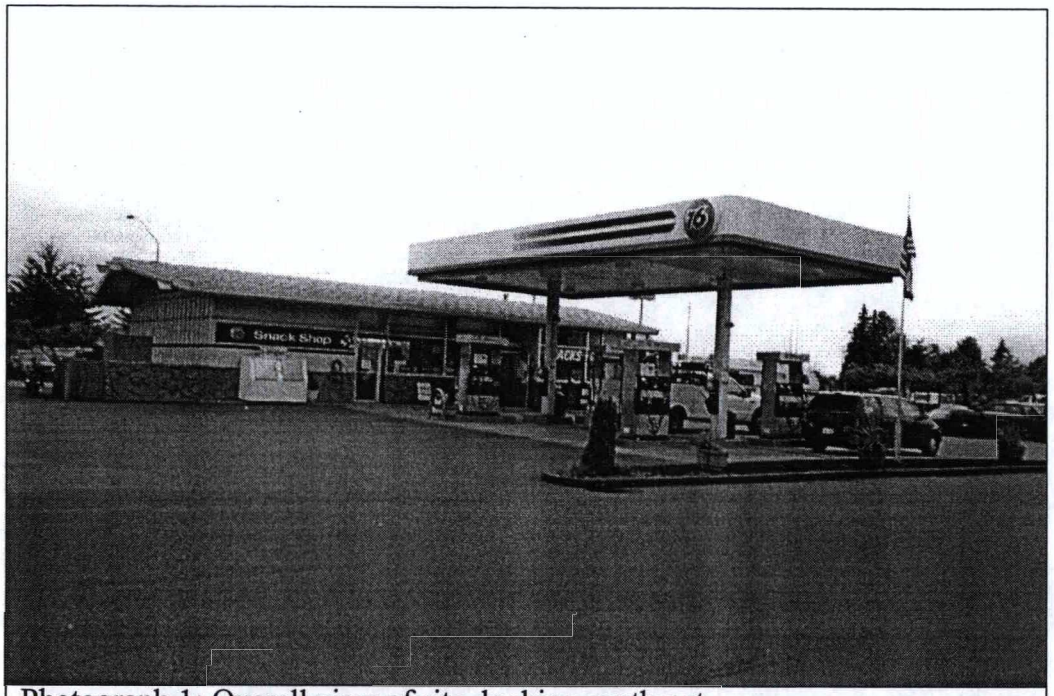
APPENDICES

APPENDIX A

ATTACHMENT A
SITE PHOTOGRAPHS



Photograph 1: Overall view of site, looking southeast.

Photograph 2: View of removed hydraulic hoist

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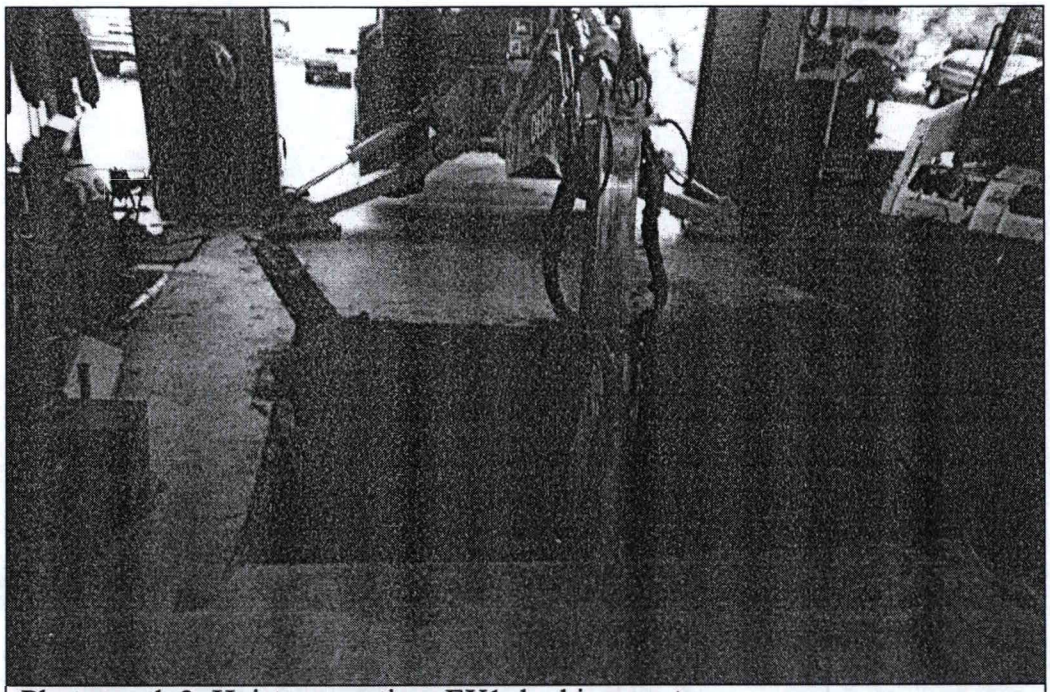
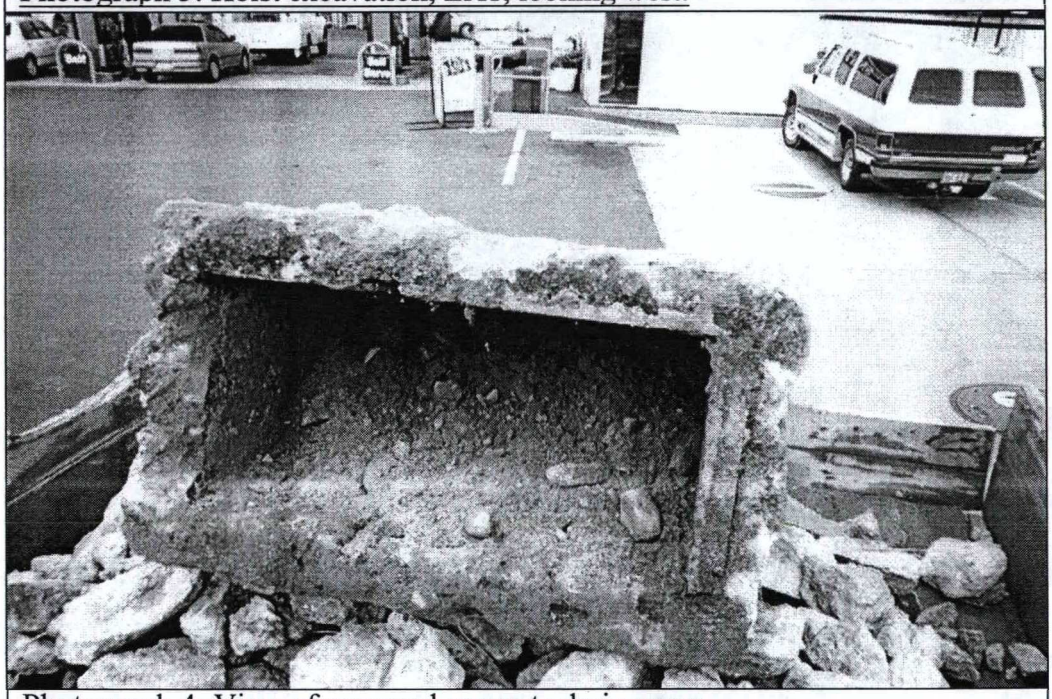
	JOB#: 01TO.10614.01 | *DATE:* July 8, 2002



Photograph 3: Hoist excavation, EX1, looking west.



Photograph 4: View of removed concrete drain sump.

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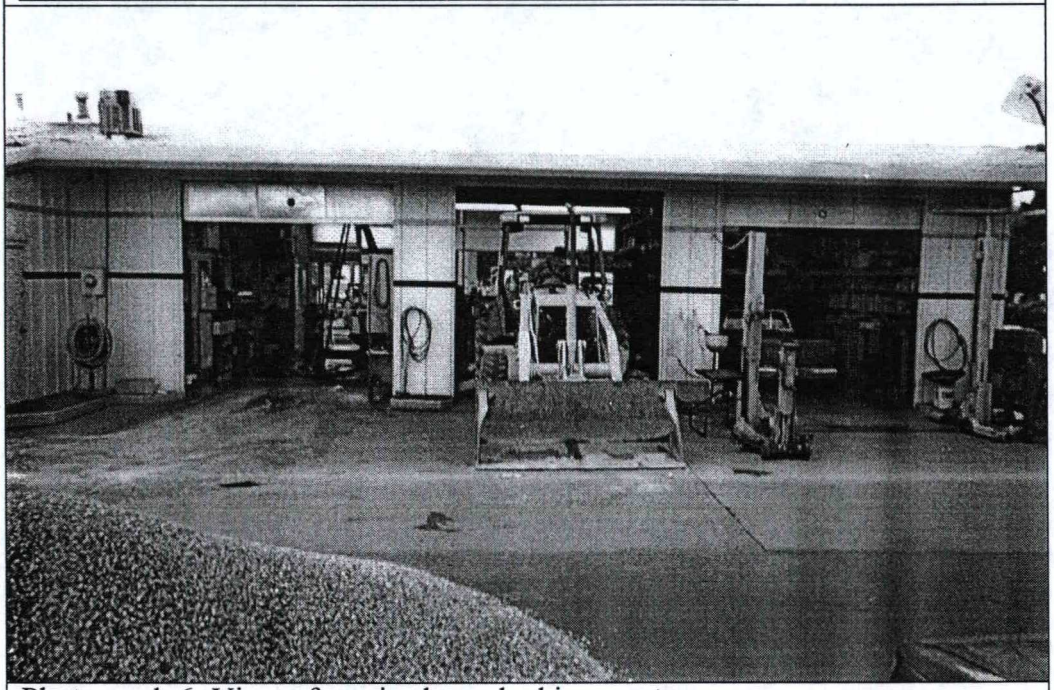
	JOB#: 01TO.10614.01	*DATE:* July 8, 2002

Photograph 5: View of soil stockpile, SP1, looking east.



Photograph 6: View of service bays, looking west.

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	JOB#:01TO.10614.01	*DATE:* July 8, 2002